Resistance Training and the Elderly: An Investigation into Psychological Wellbeing and Life Satisfaction

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology

at Massey University, Palmerston North, New Zealand.

Kevin Maxwell Barker

2005

ABSTRACT

This exploratory study examined the psychological benefits of high-intensity resistance training in an elderly age group. Participants in the sample (N=76) aged between 70-80, were randomly allocated to two groups (37 exercisers- 18 female and 19 male; 39 controls- 20 female and 19 male). Both groups completed five self-report questionnaires measuring psychological variables. The Purpose in Life Test (PIL), Profile of Mood States (POMS), State-Trait Anxiety Inventory (STAI), Affectometer 2, Rosenbergs Self-Esteem Scale (RSES) and a Dynamometer hand-grip strength test were administered pre-test, mid-test and post-test .The independent variable in this study was a 12 week high-intensity resistance training programme especially designed for this age group and supervised by qualified instructors at a commercial gymnasium. Repeated measures ANOVA produced results that indicated a high intensity resistance training programme provided strength gains, and improved some aspects of psychological wellbeing and life satisfaction components in older adults. There are positive indications from this study that this format of planned exercise can assist in the promotion of life quality enabling adaptation to changing situations often accompanying increasing age.

ACKNOWLEDGEMENTS

First and foremost, a sincere debt of gratitude to my wife Haana, a source of support and love over the past seven years. It was your vision that inspired me to embark on this academic journey, and it has been your strength and commitment that has made this thesis possible.

I would like to thank Dr Richard Fletcher, my supervisor for the direction and encouragement that pulled through those darkest hours.

Many thanks to the manager of the ASB Gymfit Kerikeri gymnasium, Debbie Klinac, instructor and mentor Anthony Warren, Richard Mason and Jill Lowe. Thank you all for believing in this project and providing the level of support that saw the "gym experience" with the elderly group the very best part of the project.

Next, a big thank you to Karen Watene for your word processing skills, and unfailing commitment to help over the past years, your kindness has made the challenging process of studying at a distance so much easier.

I would like to thank the staff at the Kerikeri High School Information Technology department, Guy, Paul and Amy, and Homestead Physio for their invaluable assistance.

Special mention here of my parents, Max and Moira, now gone, but always present. Thank you for the examples you consistently set.

Lastly, my children, Corey, Ashleigh and Tayler. Nothing would make sense without you; you have provided the best 'time out' from the rigours of countless assignments.

Approval for this research was obtained from the Massey University Human Ethics Committee (approval No.04/061) and the Health and Disabilities Ethics Committee (approval No. AKX /04/8/229) for the experiment described in the thesis.

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES